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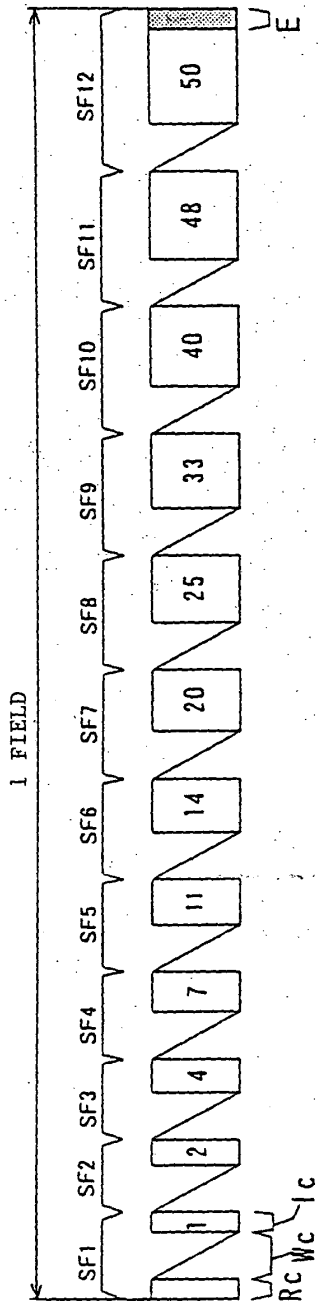

FIG. 1

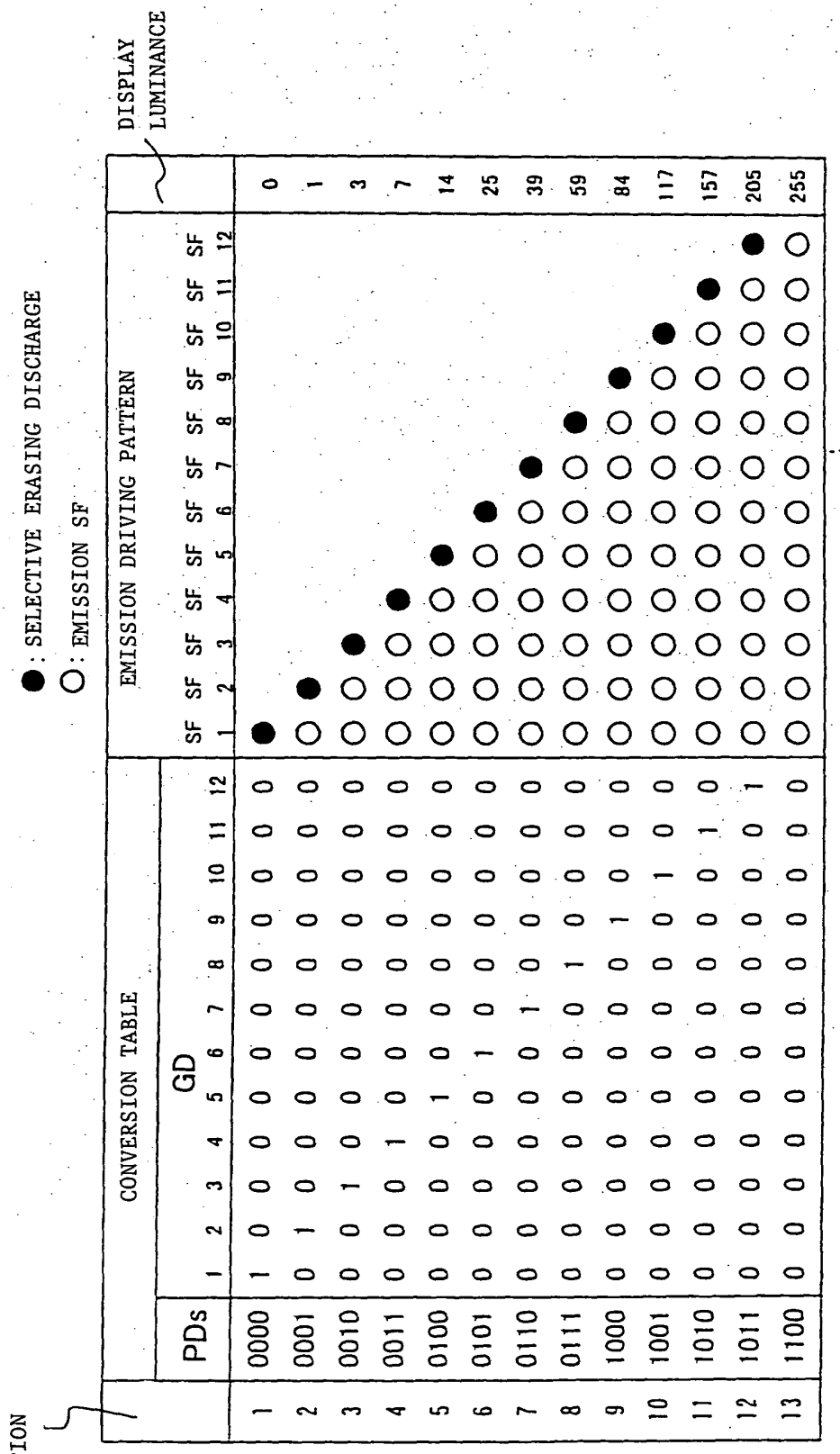
●: SELECTIVE ERASING DISCHARGE
○: EMISSION SF
GRADATION
CONVERSION TABLE
PDs
GD
EMISSION DRIVING PATTERN
SF
DISPLAY LUMINANCE
1 0000 1 0 0 0 0 0 0 0 0 0 0 0 0 0
2 0001 0 1 0 0 0 0 0 0 0 0 0 0 0 1
3 0010 0 0 1 0 0 0 0 0 0 0 0 0 0 3
4 0011 0 0 0 1 0 0 0 0 0 0 0 0 0 7
5 0100 0 0 0 0 1 0 0 0 0 0 0 0 0 14
6 0101 0 0 0 0 0 1 0 0 0 0 0 0 0 25
7 0110 0 0 0 0 0 0 1 0 0 0 0 0 0 39
8 0111 0 0 0 0 0 0 0 1 0 0 0 0 0 59
9 1000 0 0 0 0 0 0 0 0 1 0 0 0 0 84
10 1001 0 0 0 0 0 0 0 0 0 1 0 0 0 117
11 1010 0 0 0 0 0 0 0 0 0 0 1 0 0 157
12 1011 0 0 0 0 0 0 0 0 0 0 0 1 0 205
13 1100 0 0 0 0 0 0 0 0 0 0 0 0 0 255

FIG. 2

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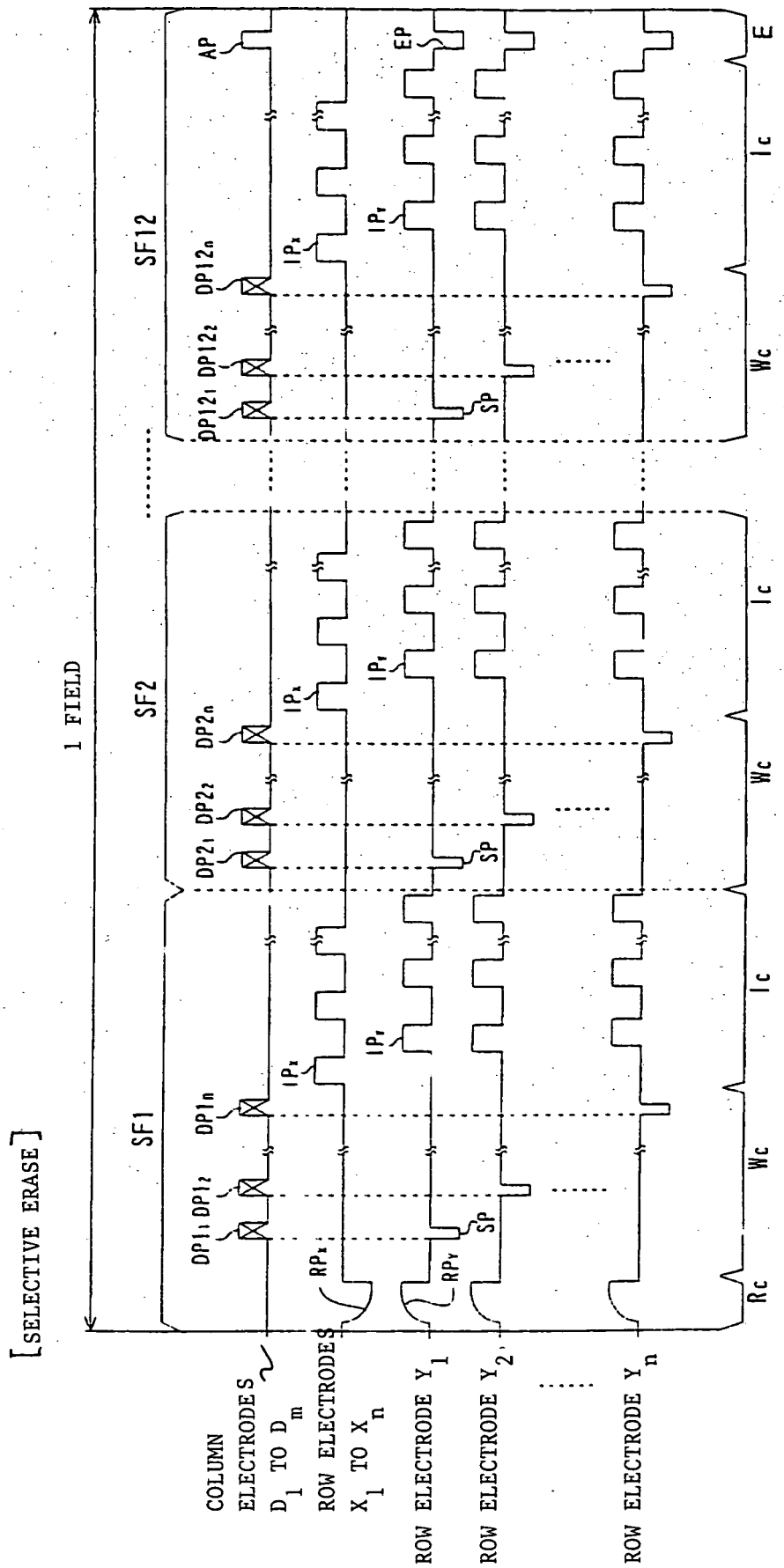

FIG. 3

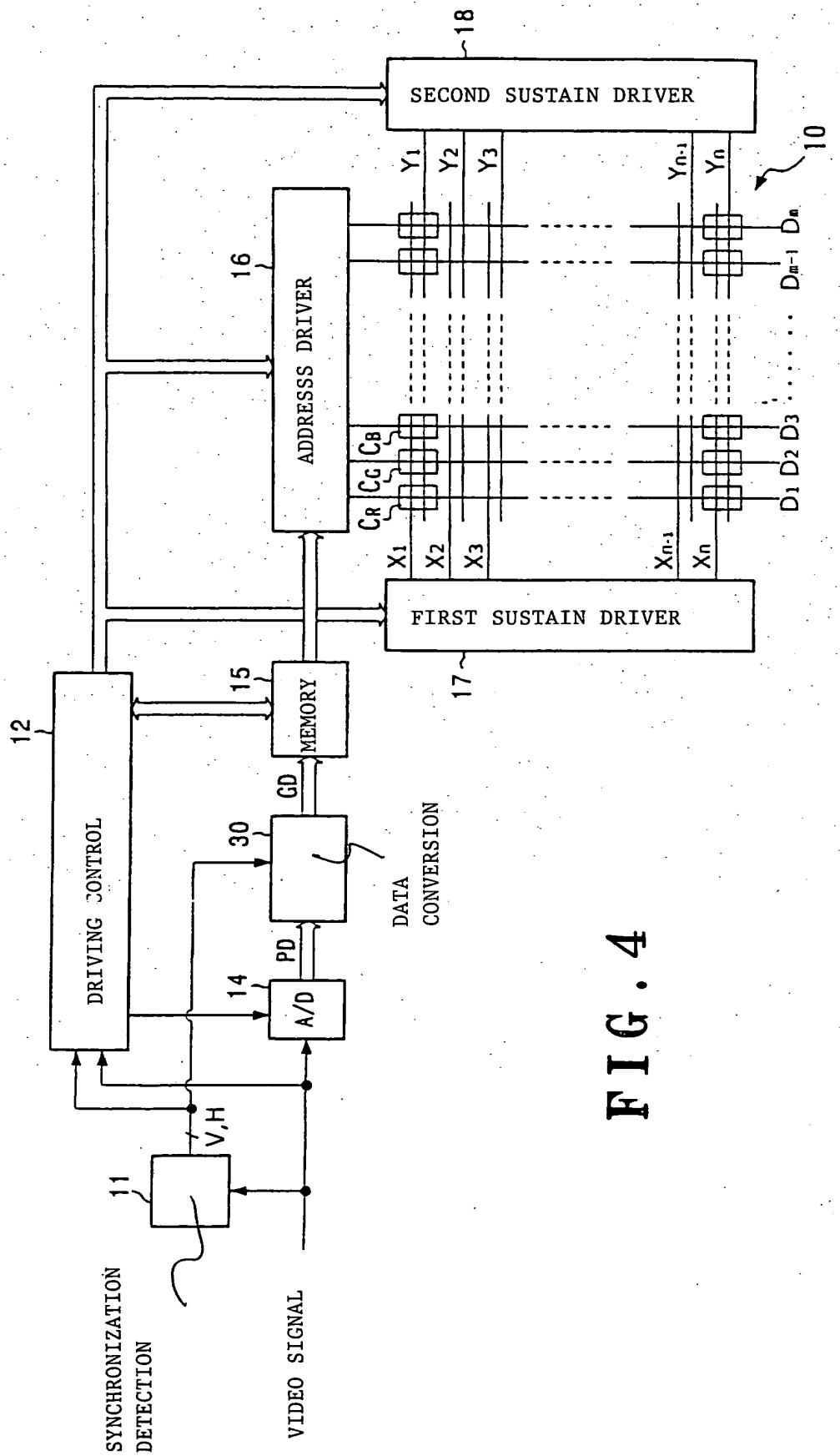
18
SECOND SUSTAIN DRIVER
10
Y1
Y2
Y3
Yn-1
Yn
Dn
Dm-1
16
ADDRESSS DRIVER
CB
CG
CR
D3
D2
D1
X1
X2
X3
Xn-1
Xn
FIRST SUSTAIN DRIVER
17
15
MEMORY
12
DRIVING CONTROL
GD
30
DATA CONVERSION
PD
14
A/D
V,H
11
SYNCHRONIZATION DETECTION
VIDEO SIGNAL

FIG. 4

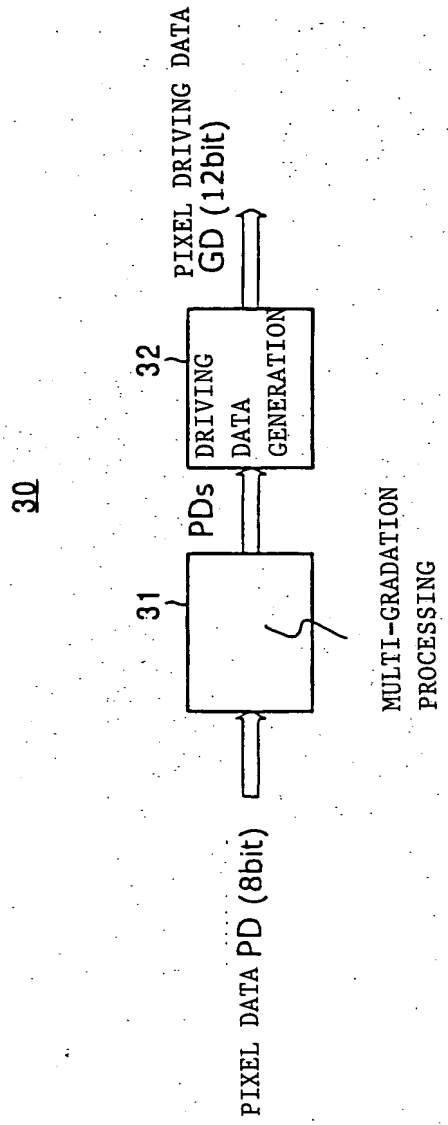
30
31
32
PDs
DRIVING DATA GENERATION
MULTI-GRADATION PROCESSING
PIXEL DATA PD (8bit)
PIXEL DRIVING DATA GD (12bit)

FIG.5

GRADATION DRIVING

LUMINANCE

	CONVERSION TABLE		EMISSION PATTERN												
	PDs	GD 1 2 3 4 12	SF 1	SF 2	SF 3	SF 4	SF 5	SF 6	SF 7	SF 8	SF 9	SF 10	SF 11	SF 12	
1	0000	0 * * * * * * * * * * *													0
2	0001	1 1 * * * * * * * * * *	◎	●											1
3	0010	1 0 1 * * * * * * * * *	◎	○	●										3
4	0011	1 0 0 1 * * * * * * * *	◎	○	○	●									7
5	0100	1 0 0 0 1 * * * * * * *	◎	○	○	○	●								13
6	0101	1 0 0 0 0 1 * * * * * *	◎	○	○	○	○	●							25
7	0110	1 0 0 0 0 0 1 * * * * *	◎	○	○	○	○	○	●						39
8	0111	1 0 0 0 0 0 0 1 * * * *	◎	○	○	○	○	○	○	●					59
9	1000	1 0 0 0 0 0 0 0 1 * * *	◎	○	○	○	○	○	○	○	●				84
10	1001	1 0 0 0 0 0 0 0 0 1 * *	◎	○	○	○	○	○	○	○	○	●			117
11	1010	1 0 0 0 0 0 0 0 0 0 1 *	◎	○	○	○	○	○	○	○	○	○	●		157
12	1011	1 0 0 0 0 0 0 0 0 0 0 1	◎	○	○	○	○	○	○	○	○	○	○	●	205
13	1100	1 0 0 0 0 0 0 0 0 0 0 0	◎	○	○	○	○	○	○	○	○	○	○	○	255

FIG. 6

*: 0 OR 1

◎ : SELECTIVE WRITING ● : SELECTIVE ERASURE ○ : SUSTAIN DISCHARGE EMISSION SF

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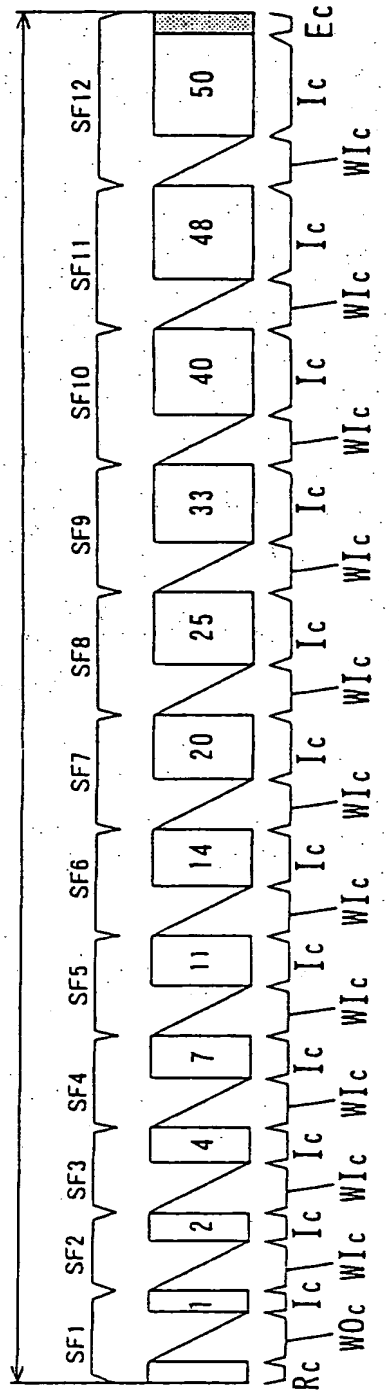

FIG. 7

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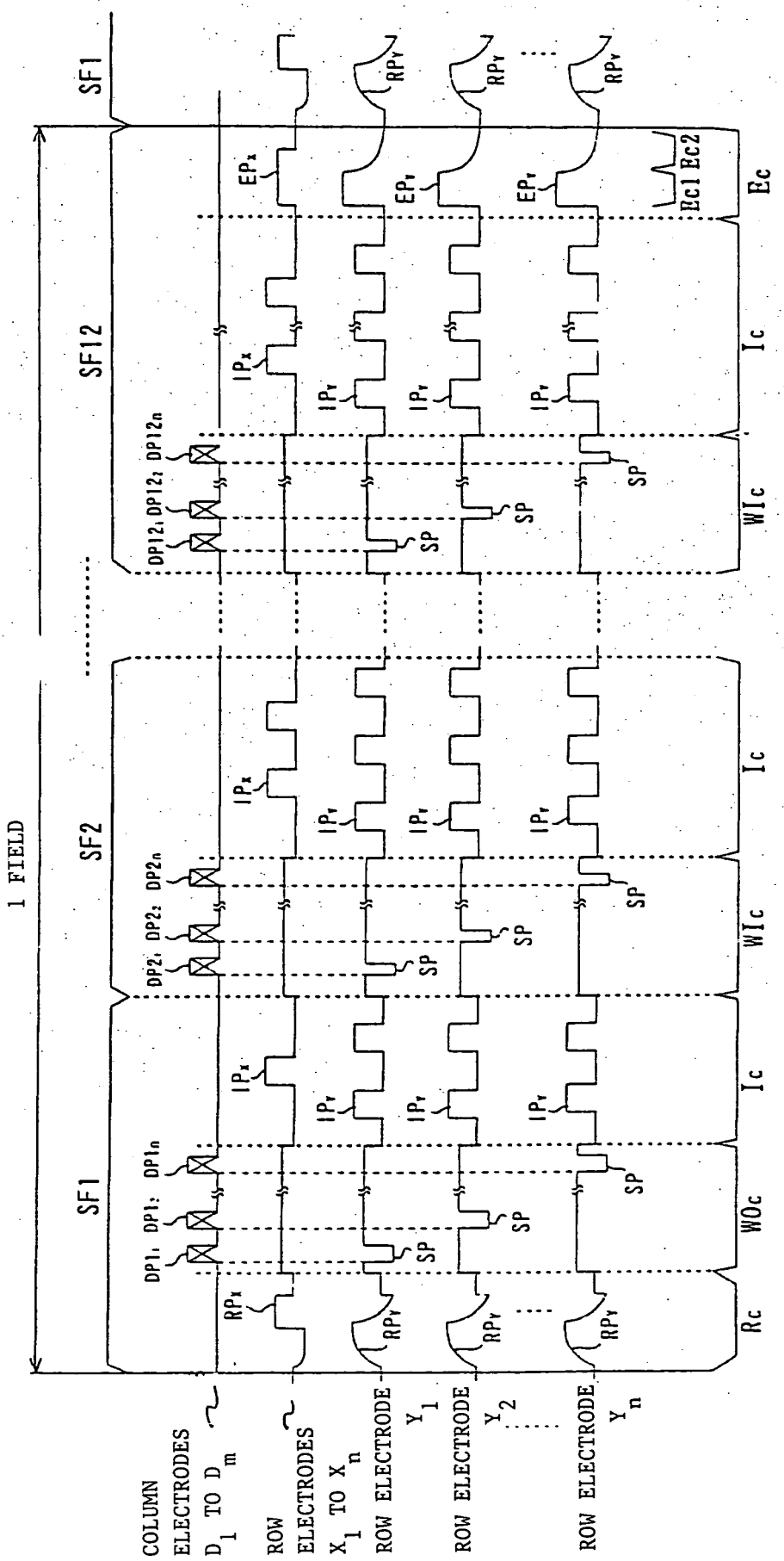

FIG. 8

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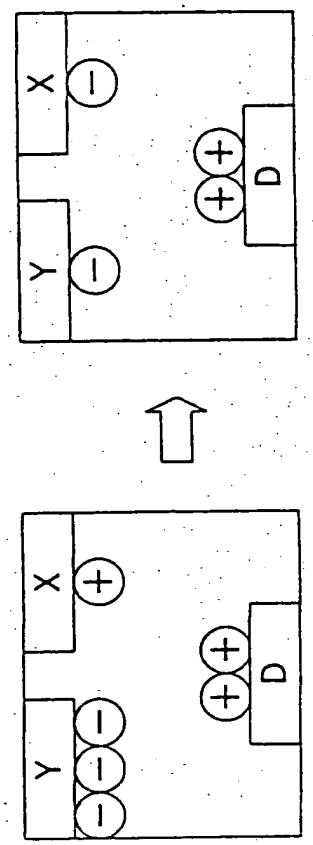

FIG.9B

FIG.9A

FIG.10A FIG.10B FIG.10C FIG.10D FIG.10E FIG.10F

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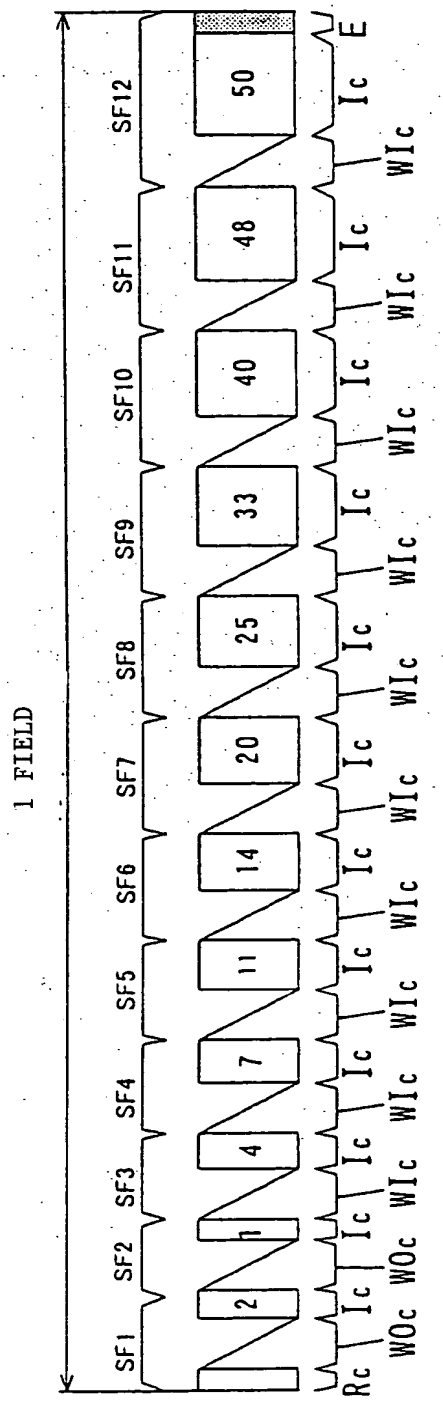

FIG. 11

GRADATION DRIVING

LUMINANCE

	CONVERSION TABLE		EMISSION PATTERN												
	PDs	GD 1 2 3 4 ····· 12	SF 1	SF 2	SF 3	SF 4	SF 5	SF 6	SF 7	SF 8	SF 9	SF 10	SF 11	SF 12	
1	0000	0 * * * * * * * * * * *													0
2	0001	0 1 1 * * * * * * * * *		◎	●										1
3	0010	1 1 1 * * * * * * * * *	◎	◎	●										3
4	0011	1 1 0 1 * * * * * * * *	◎	◎	○	●									7
5	0100	1 1 0 0 1 * * * * * * *	◎	◎	○	○	●								13
6	0101	1 1 0 0 0 1 * * * * * *	◎	◎	○	○	○	●							25
7	0110	1 1 0 0 0 0 1 * * * * *	◎	◎	○	○	○	○	●						39
8	0111	1 1 0 0 0 0 0 1 * * * *	◎	◎	○	○	○	○	○	●					59
9	1000	1 1 0 0 0 0 0 0 1 * * *	◎	◎	○	○	○	○	○	○	●				84
10	1001	1 1 0 0 0 0 0 0 0 1 * *	◎	◎	○	○	○	○	○	○	○	●			117
11	1010	1 1 0 0 0 0 0 0 0 0 1 *	◎	◎	○	○	○	○	○	○	○	○	●		157
12	1011	1 1 0 0 0 0 0 0 0 0 0 1	◎	◎	○	○	○	○	○	○	○	○	○	●	205
13	1100	1 1 0 0 0 0 0 0 0 0 0 0	◎	◎	○	○	○	○	○	○	○	○	○	○	255

FIG. 12

*:0 OR 1

◎ :SELECTIVE WRITING ● :SELECTIVE ERASURE ○ :SUSTAIN DISCHARGE EMISSION SF